



Safety

Want to Make Your Workplace Safer? These Smartphone Apps Can Help

James Langford | Oct 17, 2024

The smartphone that helps you solve math problems, refill prescriptions and lock the doors of your house instantaneously can also help keep you safe at work.

At least, it can if you have the right apps.

And with the number of options on the market today, the odds of finding one or more *that work for your machine shop or manufacturing facility* are increasingly in your favor.

Built to help with tasks from reporting hazards to administering first aid and selecting personal protective equipment, workplace safety apps are rapidly gaining traction in U.S. businesses, simplifying responsibilities that once required reams of paperwork, hours of in-person meetings and weeks or months to complete.

Worldwide, the market for them is expected to reach \$1.3 billion by 2030, nearly three times its size in 2023, according to *Valuates Reports*, a market research firm.

High-tech safety tools “provide opportunities to keep workers safe from the most dangerous tasks, to reduce their workloads and to mitigate adverse outcomes through monitoring and alert systems,” the *National Safety Council* said in a study published in late June that analyzes the attitudes of companies and their workers toward the products.

Employees surveyed in 2023 were “significantly more aware of emerging safety technologies” than three years earlier, the study says, and with the increasing usage of technology from drones to vital-sign monitors in their personal lives, many workers “are open, and even eager, to use these solutions at work.”

'Alleviating the Guesswork'

The benefits of digital tools include reducing the time required for safety inspections, boosting employee reporting of safety issues—a priority for OSHA, and helping workers identify and address hazards, according to *SafetyCulture*, an Australian technology firm whose products include mobile workplace safety apps.

One example of hazard prevention is *improving PPE selection*. While businesses are required to provide safety data sheets for hazardous materials that include recommended safety equipment, the suggestions can be vague.

A set of digital tools developed by personal protective equipment maker Ansell helps workers eliminate the guesswork that can occur when a safety data sheet makes a general recommendation on hazardous chemical gear, says Dwayne Bailey, senior manager for channel development at the company.

The *AnsellGUARDIAN® Chemical tools*, available on mobile and web browsers, offer services that include suggesting Ansell gloves and other gear based on specific chemical hazards.

"Figuring out which materials protect wearers from which chemical can be mystifying" without the right data and the risk of harm can be high, Bailey explains. "There's no single glove that fits every situation."

By the time workers wearing the wrong glove for a particular substance notice that it's begun to deteriorate, they've already been exposed, says Bailey, whose company also offers in-person consultations through its AnsellGUARDIAN® risk assessment service.

"We alleviate the guesswork for our customers," he adds.

More broadly, mobile safety technology can "serve as an extension of risk and safety teams across multiple facilities and jobs," Origami Risk, a provider of cloud-based software services, explains in a blog post.

Evaluating the Risks

Despite such benefits, using workplace safety apps requires companies to resolve questions including whether employees are using company-owned phones and tablets or their personal devices.

The answers, and the control that safety apps offer to users, helps determine the risks associated with sharing company-owned data, the security measures required to keep it safe and what happens to it when employees using their personal devices leave a company.

Companies should also consider what types of information various apps can handle, from video inputs to QR codes; how easy they are to use; whether they can translate dictation to text and whether they allow anonymous reporting, Cameron Schwartz, an Origami Risk sales associate, says in a video posted on the *American Society of Safety Professionals' website*.

Here's a look at some of the mobile apps and other digital tools U.S. workplaces are adopting as they navigate such questions while seeking to leverage the advantages of improving technology:

- **First Aid:** This app from the *American Red Cross* explains how to handle common first-aid situations and offers text/video advice from experts. It includes 911 calling capability as well as a hospital locator. Users can also access course certifications and toggle between English and Spanish.

- Available on Apple App Store, Google Play
- **Heat Safety Tool:** Developed by the U.S. Department of Labor, the U.S. Occupational Safety and Health Administration, the Centers for Disease Control and Prevention and the National Institute for Occupational Safety and Health, the *heat safety app* enables users to calculate the heat index for a work site and, based on that, the potential risk to outdoor workers. Afterward, users get periodic reminders about heat safety measures including drinking fluids and taking rest breaks, points included in *OSHA's proposed heat safety rule*. The app is available in both English and Spanish.
 - Available on the Apple App Store, Google Play
- **AnsellGUARDIAN® Chemical:** Developed by Ansell, the maker of safety gloves and other personal protective equipment, the *suite of digital tools* helps businesses simplify PPE selection, the company says. The product selector suggests Ansell gear based on specific chemical hazards and the permeation and degradation database supplies information on thousands of chemical and product combinations through an easy-to-use search function. Users may also search Ansell products and download chemical permeation test data.
 - Available on desktop and mobile web browsers
- **Ladder Safety App:** The first *mobile application* from the National Institute for Occupational Safety and Health, it's designed to help users reduce the risks that come with using stepladders and extensions. While ladder accidents are preventable, they're linked to more than 100 workplace deaths a year and thousands of on-the-job injuries, according to *the CDC*. The institute app's angle-measurement tool helps users set ladders at the correct angle, a selection tool assists with selecting the appropriate ladder duty rating and an inspection tool includes a comprehensive checklist for setup.
 - Available on the Apple App Store, Google Play
- **SafetyCulture:** This app, produced by the global technology firm of the same name, is a safety inspection and audit tool that allows users to create customized safety checklists, upload photos and videos of hazards and identify recurring safety incidents.
 - Available on the Apple App Store, Google Play and web browsers.

What mobile apps does your business use to improve workplace safety? Tell us in the comments below.